

Notice of Allowability

Application No.

10/820,409

Examiner

Jeff Wollschlager

Applicant(s)

MAY, GREGORY J.

Art Unit

1791

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the RCE filed October 19, 2007.
2. ☒ The allowed claim(s) is/are 1,4,7-10 and 27-29.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted: Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview (voicemails) with attorney Julia Dierker on January 4, 2008.

The application has been amended as follows:

Claims 5 and 6 have been canceled.

Claim 1 (amended): A method of producing a three-dimensional object, comprising the steps [of]:

disposing at least one layer of a first material onto a first area in an iterative manner using at least one ink-jet printhead, wherein the first material is selected from a build material and a contrast enhancing material;

disposing at least one layer of a second material and the first material on top of the first area using at least one ink-jet printhead, wherein the second material is [selected from a build material and] a contrast enhancing material, wherein the second material is [being] disposed onto a designated area, wherein the first material is [being] disposed onto a second area, wherein the second area and the designated area are different areas on top of the first area, wherein the first material and the second material are not the same material;

forming a[n] first identifiable structure from at least one layer of the second material;

disposing at least one layer of the first material on top of the second area and the designated area using at least one ink-jet printhead;

forming the first identifiable structure from the second material within the three-dimensional object, wherein the first identifiable structure within the three-dimensional object is [being] detectable using a non-invasive dimensional imaging device, wherein the three-dimensional object is selected from: a bone replacement[,] and a medical device disposed within a body of an individual;

disposing a third material onto a portion of the designated area, [wherein the second material is a contrast enhancing material,] wherein the third material is a contrast enhancing material, and wherein the second material and the third material are different contrast enhancing materials; and

forming a second identifiable structure embedded within the first identifiable structure using the third material, wherein the second identifiable structure within the three-dimensional object is detectable using a second non-invasive dimensional imaging device.

Claims 1, 4, 7-10 and 27-29 are allowed. The following is an examiner's statement of reasons for allowance: The prior art of record does not teach or suggest an ink-jet printing layered manufacturing method to form a bone replacement or a medical device wherein first and second identifiable structures are contained within the bone replacement or medical device such that the identifiable structures can be detected by a non-invasive dimensional imaging device and wherein the second identifiable structure is embedded within the first identifiable structure in combination with the other features instantly claimed .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeff Wollschlager whose telephone number is 571-272-8937. The examiner can normally be reached on Monday - Thursday 7:00 - 4:45, alternating Fridays.

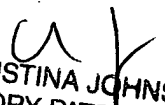
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JU

Jeff Wollschlager
Examiner
Art Unit 1791

January 4, 2008


CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER